

# Claims

1. Method for the pasteurisation of drinks, in particular beer by thermal treatment, in which a flow volume of the product is heated above a pasteurisation temperature and then cooled again before it is filled into its containers,

**characterised in that**

immediately after a heating phase (30) that lasts until a previously calculated maximum temperature (33) has been reached, the cooling phase (34) in which the product's temperature decreases is commenced, such that a maximum quantity of pasteurisation units (PU) to be applied for the pasteurisation of the specific product is first computed, and the temperature variation in the heating phase (30), the length of the heating phase, and the temperature variation and length of the cooling phase (34), are then chosen so that during pasteurisation, the number of pasteurisation units previously calculated corresponds to the total number of pasteurisation units actually applied during the heating and cooling phases.

2. Method for the pasteurisation of drinks, in particular beer, according to Claim 1,

**characterised in that**

a pasteurisation unit is defined as:

$$PU = t_h * 1,393^{(9h-92)}.$$

3. Method for the pasteurisation of drinks, in particular beer, according to Claims 1 or 2,

**characterised in that**

the heating phase (30) in the temperature range within which pasteurisation takes place (above the pasteurisation temperature  $\theta_2$ ) is shorter than the cooling phase (34) (above the pasteurisation temperature).

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4. Method for the pasteurisation of drinks, in particular beer, according to any of Claims 1 to 3,  
**characterised in that**  
in the heating phase (30) the product stream is heated in a recuperator by heat transfer from the outflowing product stream.
5. Method for the pasteurisation of drinks, in particular beer, according to any of Claims 1 to 4,  
**characterised in that**  
additional heating by a medium with higher temperature, in particular hot water or steam, is provided.
6. Method for the pasteurisation of drinks, in particular beer, according to any of Claims 1 to 5,  
**characterised in that**  
at the conclusion of the heating in a recuperator, heating in a heater takes place at least during a part (32) of the heating phase.
7. Method for the pasteurisation of drinks, in particular beer, according to any of Claims 1 to 6,  
**characterised in that**  
at least part of the cooling during the cooling phase (34) takes place in a recuperator, with the outflowing beer stream to be cooled flowing counter-current to the inflowing beer stream to be heated.
8. Method for the pasteurisation of drinks, in particular beer, according to any of Claims 1 to 7,  
**characterised in that**  
the product stream is cooled in a heat exchanger by means of an outside medium.

add A45

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